IMPLEMENTATION TEAM MEETING NOTES

April 1, 2004, 9:00 a.m.-4 p.m.

NATIONAL MARINE FISHERIES SERVICE OFFICES
PORTLAND, OREGON

I. Greetings, Introductions and Review of the Agenda.

The April 1, 2004 meeting of the Implementation Team, held at the NOAA Fisheries office in Portland, Oregon, was chaired by Jim Ruff of NOAA Fisheries and facilitated by Donna Silverberg. The meeting agenda and a list of attendees are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced in the body of the text may be too lengthy to attach; all enclosures referenced are available upon request from NOAA Fisheries' Kathy Ceballos at 503/230-5420 or via email at kathy.ceballos@noaa.gov.

Silverberg welcomed everyone to the meeting, led a round of introductions and a review of the agenda.

2. Updates.

A. In-Season Management (TMT). Cindy Henriksen said TMT met yesterday to discuss the start of the fish passage season. The group discussed the spring/summer update to the 2004 Water Management Plan, which is now 90% complete. The most recent draft of the spring/summer update is available via the TMT homepage. At yesterday's meeting, it was agreed to begin MOP +1 operations at the Lower Snake reservoirs, beginning at Lower Granite on Saturday and ending with Lower Monumental on Tuesday. We also discussed the start of spill operations at the Lower Snake projects, Henriksen said; spill will begin at Lower Granite at 6 p.m. Saturday, April 3,

with 6-7 Kcfs spill through the RSW, plus 12 Kcfs training spill. Spill will start at 6 p.m. April 5 at Little Goose, at 6 p.m. April 7 at Lower Monumental and at 6 p.m. April 9 at Ice Harbor. Henriksen noted that the salmon managers will be reviewing the fish passage information on Monday to see whether any revisions to this schedule are necessary. The TMT also discussed the offsets for the diving necessary to attach the behavioral guidance screen; on Monday night, Thursday night and Friday night, we will be spilling up to the gas cap once the day's diving is complete, she said.

We haven't begun flow augmentation as yet, said Henriksen; at our next meeting, scheduled for Thursday, April 9, we will be discussing flow augmentation and spill in the Lower Columbia River. Moving on to water supply, Henriksen noted that the recent beautiful weather has had a detrimental effect on the water supply overall. The March final water supply forecast at Lower Granite was 87% of average; the March mid-month forecast showed a 1-2% decline at that project. The April early-bird forecast should be available later today. The March 31 flood control elevations have been going up across the basin, but with low inflows, reservoirs have not been able to refill. We are now predicting that the storage reservoirs are unlikely to meet their April 10 flood control elevations – Libby, Hungry Horse, Grand Coulee (by 6-7 feet). Dworshak may reach its April 10 flood control elevation because inflow to that project has been on the rise.

Henriksen noted that Idaho Power Company requested the ability to shift flood control from Brownlee to Grand Coulee, but because their inflows fell, they were unable to shift any volume to Grand Coulee. The same was true of Dworshak, Henriksen said. It is now getting too late in the season to build significant snow pack, Henriksen added; it remains to be seen whether we will get a shot of precipitation later in the spring to help boost river flows. In response to a question from John Palensky, Henriksen said the 10-day National Weather Service forecast is for more beautiful weather.

So if we get average precipitation over the rest of the spring, we're looking at about 85% of average water supply across the basin? Palensky asked. If we're lucky, yes, Henriksen replied. And how far are Libby and Hungry Horse below their URC elevations? Ruff asked. Libby's April 10 URC elevation is 2442 feet; the project is currently at 2398 – 44 feet below April 10. At Hungry Horse, current elevation is 3515; the April 15 URC elevation at that project is 3536 – about 20 feet below, currently. In response to another question, Henriksen said that, even with the planned sturgeon operation, there is still a significant chance that Libby will refill by June 30, in the Corps' view.

B. Independent Scientific Advisory Board (ISAB). No ISAB report was presented at today's meeting.

C. Water Quality Team (WQT). Mark Schneider reported that the main issue the WQT has been discussing recently concerns the Camas/Washougal fixed monitoring station below Bonneville. The salmon managers have requested that TDG monitoring

below Bonneville be switched to the Bonneville tailwater station; the Camas/Washougal station is several miles below the project, and was chosen as a surrogate for the "next project downstream" – a hypothetical forebay station, in other words.

Schneider noted that RPA 132 in the 2000 BiOp introduced the term "representativeness," which asked the action agencies to evaluate how well the fixed monitoring stations were actually representing conditions in the river. One problem with Camas/Washougal is that it is heavily affected by environmental factors, such as air temperature and wind, Schneider explained. The WQT has been looking at all of the fixed monitoring stations and making recommendations to the Corps about where to place those stations, said Schneider; below Bonneville, what we've found is that changes in Bonneville operations are reflected much more quickly and accurately at the Bonneville tailwater station than they are at Camas/Washougal, hence the salmon managers' recommendation that this change be made. Schneider distributed a letter from the salmon managers explaining their position.

One problem with this change is state waiver requirements, said Schneider; however, recognizing the problems at Camas/Washougal, both Washington and Oregon have agreed to support this change. We have discussed this topic at several WQT meetings, which ultimately yielded the salmon managers' letter to the Corps, Schneider said. Another concern is the potential effect on the habitat and resident fish below Bonneville, Schneider said; that, too, is covered in the letter – resident fish respond to TDG in precisely the same way anadromous salmonids do, by seeking depth compensation.

The letter has been submitted to the Corps, said Schneider; we are now awaiting the Corps' response, and that's where the issue rests. The letter is not from the WQT? Suzanne Cooper asked. No – it's from the salmon managers, although it recommends coordination with the WQT, Schneider replied. My understanding is that the Camas/Washougal station was also intended to give us a feel for the gas levels we were sending into the estuary, said Cooper – does the letter address that issue? Essentially, there will be no change, Schneider replied – that is also related to the habitat question, and the effects of the change on the biology of the area, so basically, yes, that is covered in the letter. Will the tailrace monitor pick up TDG coming out of the corner collector? Cooper asked. No, Schneider replied – that particular factor will continue to be monitored at Camas/Washougal, but what the salmon managers are saying is, when it comes to managing overall spill operations at Bonneville, use the Bonneville tailrace monitor.

The group devoted a few minutes of discussion to the details of this recommended change; Schneider reiterated that, according to the available evidence, the Camas/Washougal station is significantly influenced by environmental factors such as wind and air temperature, rather than accurately reflecting TDG generated through spill operations. Jim Litchfield said he would like to see some analysis of the effects of this change on total spill volume, fish passage and survival. That's being worked up,

Jim Athearn replied – that's something the Corps needs before making this change as well. Litchfield observed that the persistence of the TDG load below Bonneville is another important factor in this equation, and would no longer be measured if this change is made. It's not an issue of no longer wanting to know what's going on farther downstream, Tweit observed – it's an issue of which station is being used as the in-season control point, in terms of TMDL compliance.

When can we expect a Corps response to the salmon managers' letter? Tweit asked. We're working on it, but I don't have a precise timeline for you, Henriksen replied. Athearn noted that the Lower Columbia spill program is expected to begin in mid-April, so there is some urgency to resolve this issue. Silverberg said she will place an update on this issue on the May IT agenda. In response to a request from Bill Maslen, Schneider said he will provide NOAA Fisheries' analysis of the biological effects of this proposed change, with respect to the BiOp performance standards.

The discussion continued in this vein for some minutes, with various IT participants expressing concern about the effects of this potential change in monitoring sites on spill volumes at Bonneville, as well as its implications for the action agencies' ability to meet the BiOp performance standards. Maslen observed that he had not heard that the tailwater station is more representative of the actual conditions the fish are experiencing in-river; he noted that the fish don't care whether TDG is generated at the dam or caused by environmental factors. Howard Schaller noted that after several seasons of monitoring, the Fish and Wildlife Service had concluded that the readings at the tailwater station were consistent with mid-channel readings taken from a boat downstream. A USGS participant added that it should be possible to correct the readings at Camas/Washougal for environmental factors. Ultimately, Silverberg reiterated that there will be an update on this topic at the May IT meeting.

D. System Configuration Team (SCT). No SCT update was presented at today's meeting.

E. TMDL Update. No TMDL update was provided at today's meeting.

3. Action Agencies' Summer Spill Proposal Including Offsets.

Silverberg noted that this issue has been the subject of ongoing discussions in this forum for some time; the federal action agencies have now released their draft summer spill proposal. This document is now available via the www.salmonrecovery.gov website.

Suzanne Cooper said the action agencies had provided a briefing on Tuesday to various state, tribal and fisheries groups; she said her intent was to provide the same briefing today. Cooper distributed copies of the preliminary proposal, then touched on the following major topic areas:

- The history of and background for of this effort, including letters from various Congressional members and the Governors of Oregon, Washington, Idaho and Montana
- The goal of this proposal: to achieve similar or better biological performance in comparison to the current summer spill program, consistent with the Biological Opinion performance standards
- The CBFWA-facilitated process through which this preliminary proposal was developed
- The proposal itself: a three-year program of summer spill reductions in combination with a series of offset actions (2004-2006).

- The specifics of the preliminary proposal:

	Ice Harbor		John Day		The Dalles		Bonneville	
	BiOp	Proposal	BiOp	Proposal	BiOp	Proposal	BiOp	Proposal
July	120% TDG 24 hours	Planned test thrun7/15; no spill 7/16-31	60% of river flow, 12 hours	30% of river flow, 24 hours	40% of river flow, 24 hours	BiOp	75 Kcfs day, 120% TDG night	test BiOp vs. 50 Kcfs/24 hours
August	120% Tdg, 24 hours	no spill	60% of river flow, 24 hours	no spill	40% of river flow, 24 hours	no spill	75 Kcfs day, 120% TDG night	no spil

Cooper noted that the expected average annual financial benefit of this operation to Bonneville and the region is $47 million. The net revenue benefit, once the offset actions are factored in, would be $33.9 million-$43.9 million per year for each of the three years.

The preliminary proposal also includes the following offset actions:

- augmented Northern pikeminnow management
- Hanford Reach anti-stranding operations

Cooper went through Table 4 of the proposal, which showed the estimated

survival reduction of the proposed operation vs. BiOp spill, by stock. These estimated reductions ranged from 0.4% to 4.8%. Cooper also went through Table 1, titled "Estimated Biological Impacts of Spill Proposal:"

Stock	Smolts	Adults
ESA-listed Snake River Fall Chinook	-500	-2 to -20
Non-listed Hanford Reach Fall Chinook	-177,000	-885 to -7,080
Other Non-listed Fall Chinook	-138,000	-690 to -5,520

Cooper also went through Table 2, titled "Estimated Offset Benefits (Increased Adult Returns):"

Stock	Pikeminnow	Hanford Reach Anti-Stranding	Total Adults
ESA-listed Snake River Fall Chinook	+1 to +11	Not applicable	+1 to +11
Non-listed Hanford Reach Fall Chinook	+250 to +8,000	+3,916 to +80,662	+4,166 to +88,662
Other Non-listed Fall Chinook	+250 to +8,000	N/A	+4,166 to +88,662

Cooper described some of the comments received on this analysis, and how the analysis was modified in response to those comments. She then responded to a series of technical comments and questions. Schaller asked how the estimated smolt-to-adult return rates were calculated for the Hanford Reach fall chinook; he noted that it is very important to determine whether those SARs are to the mouth of the Columbia, or back to the spawning grounds. These numbers seem impossibly high if you're figuring the SAR to the spawning grounds, Schaller said; if you could clarify that, that would be helpful.

In response to a question, Palensky said much of the increased Northern pikeminnow management effort will concentrate on the special reward program, in which tags on some pikeminnow can be turned in by the fisherman who catches them for bonuses of $100 or $1,000 – we've found that really increases the fishing effort, he

said. How did you address the comment that reductions in spill might increase predation pressure because predators would be able to stick closer to the dams? Rob Lothrop asked. That didn't seem to be a factor for bypassed fish, because those fish are released further downstream, Maslen replied – overall, the most recent data is inconclusive about whether spill reductions might increase predator effectiveness – the jury is still out. In response to another question, Maslen said the details of revised sport reward contract will be posted to the www.salmonrecovery.gov website once all of the details have been worked out. Until we have that information, said Tweit, it's hard to evaluate the specific numbers you've developed in terms of the potential biological impacts of this proposal.

Cooper noted that the estimated benefits of the two offset actions, combined, do not appear to achieve the goal of this effort, which is to provide similar or better biological performance to the BiOp summer spill program. Therefore, she said, one of the things we're seeking comments on is other potential offset actions. She drew the group's attention to Section B.3 of the proposal, "Other Mitigation Actions that Could Enhance Salmon Survival." The actions listed in this section include:

- Increased funding for the Council's Fish and Wildlife Program ($5 million per year)
- Additional flow augmentation from Dworshak
- Tribal harvest enforcement funding
- Additional or improved artificial production
- Avian predation research
- Additional water acquisitions
- Habitat protection
- Commercial harvest reductions (non-tribal), as available
- Additional RSWs

The group discussed the concept of increased funding for the Council's Fish and Wildlife program. Tweit asked whether the analysis underlying the final sentence in that bullet ("Federal agencies believe inclusion of this mitigation action in the final package of offsets is likely to advance our objectives of achieving similar or greater biological benefits") is available. There is no analysis underlying that statement, Cooper replied. In response to another question from Tweit, Cooper said that, if a mix of actions is determined to be able to meet the objective of similar or better biological performance, that package will be discussed at the regional executives meeting on April 16. If there is agreement that such a package will deliver the appropriate benefits, she said, the details of how it will be funded will be worked out. We need to look at the benefits of these various actions, as well as the logistics of implementing them, before determining the most appropriate funding source. Have you discussed the possibility of using an intergovernmental transfer of funds between BPA and the Corps as that funding mechanism? Lothrop asked. Not specifically, Athearn replied. In response to a question, Lothrop said one reason he raises this issue is the uncertainty, in recent years, of the Bonneville funding process for fish and wildlife projects.

In response to a question, Cooper said written comments on the preliminary proposal are due by April 7, although the April 16 regional executives meeting will provide a further opportunity for comment. Schaller noted that this short timeline places a significant burden on the agencies that choose to comment, given the fact that much of the analysis underlying the proposal has yet to be provided. And again, said Cooper, any comments you might have on the list of potential additional offset actions would be especially welcome.

Lothrop noted that there is nothing in this analysis on the effects of the proposed spill reduction on sturgeon and lamprey; tribal fisheries experts believe spill reduces predation on sturgeon eggs, so reduced spill is a concern to the states and tribes, as is screen impingement for lamprey, which tend to go with the flow in terms of passing these projects. Lamprey don't appear to fare particularly well through non-spill routes of passage, Lothrop said.

Once the comment period concludes, said Athearn, the proposal will be amended, and will be made available in advance of the April 16 Regional Executives meeting. The meeting will be held from 1-4 p.m. at the Embassy Suites Hotel at the Portland Airport. The decision about the summer spill program, which will ultimately rest with the Corps, will be made by April 22. The decision about which offsets to pursue will rest with BPA.

As part of NOAA Fisheries' decision, are you planning to make some choices from the list of available offsets for both listed and non-listed species? Tweit asked. That's still under discussion, Palensky replied, but under the remand process, the action agencies will be required to furnish us with amended one-year and five-year implementation plans. We haven't made a decision yet as to whether we will be developing a list of required or recommended offset actions in advance of that process, Palensky said.

Cooper asked whether CRITFC's analysis, which estimates that up to 140,000 adults will be impacted by the proposed reduction in spill, will be made available. It already is, Bob Heinith replied. He added that he would welcome the opportunity to sit down with BPA analysts to discuss the specific assumptions in the CRITFC and BPA analyses. Cooper replied that her understanding was that Heinith was going to coordinate such a meeting. In response to a question from Schaller, Cooper said the written rational underlying the assumptions in the BPA analysis are appended to the spreadsheet version of the analysis, which has already been released.

Does NOAA Fisheries plan to produce an independent estimate of the impacts of this proposed reduction? Tweit asked. Ruff replied that there is very little good passage information on listed fall chinook, particularly in comparison with the data for spring migrants. One of the biggest uncertainties is the benefit of transportation, he said – we really don't know whether transportation is beneficial or harmful for Snake River fall

chinook. To me, he said, that's the biggest issue here. The other major issue is where you compute the SAR, in terms of computing the loss, Heinith said. If you choose a different, lower transportation rate for fall chinook because of the uncertainty Jim mentioned, how would that factor into your analysis? Tweit asked. The choice of SAR, for instance, would become a lot more meaningful. When NOAA Fisheries evaluates the adverse effects of the proposed reduction, how will you handle that risk? When you run the models with the current assumptions we have, if you assume a delayed transport mortality of 0.2, there are cases where fish would be better off in the river, under current conditions, Ruff replied. The short answer is that the tech memo says the jury is still out on transportation, with no spill in the Snake, Palensky added. Another question is, how would the survival numbers look for transportation if you were spilling at the Snake River projects?

Athearn suggested that the most appropriate forum for the discussion of the tech memo is in the collaborative process under which its development is proceeding. If you're trying to get the science correct, and we're debating whether or not it is correct here at IT, that tells me that the collaborative process isn't as effective as it should be, Athearn said. The point is that the transportation uncertainty needs to be addressed in the impacts assessment for this proposal, Schaller observed.

What if the financial benefit is only $5 million, once all is said and done? Lothrop asked -- my sense is that BPA has made a commitment to its ratepayers that the financial savings will be at a certain threshold. I don't have an answer to that question, Cooper replied – our view is that we have to take a look at the specifics of any proposal, in terms of planned actions, their costs and the savings they would provide, before a decision is made.

Liz Hamilton asked whether BPA will be looking for the offset costs from the States of Oregon, Washington, Idaho and the tribes. When will those be available for review? she asked Also, with respect to the buyout negotiations with the commercial fleets, those impacts need to be negotiated with both non-treaty and treaty fishers as well – they can't be negotiated with the commercial fishers alone. She added that, in her view, the region's history of paying for BiOp and non-BiOp offset measures is abysmal; we have no confidence that those measures will be funded and implemented over time, Hamilton said. When you look at the promises that were made under the Mitchell Act, none of those were kept, she said. There is an ongoing GAO investigation that was triggered by the tribes' concerns about that very issue, Lothrop observed. In response to Hamilton's question, Athearn reiterated that the deadline for written comments on the action agencies' summer spill proposal is April 7.

So if this is a three-year proposal, what happens in year 4? Lothrop asked. We would expect the Council to run a public review process during year three that will result in regional agreement on a longer-term strategy, Cooper replied, adding that BPA has not yet discussed the specifics of such a process with the Council. Tom Iverson noted that this proposal has been described as a three-year study – are we actually going to

learn anything from this study, in terms of new studies planned? We expect the ongoing project-specific survival studies to continue, which will take two or three years to produce enough information to inform project operations, Cooper replied; we're also anticipating that the annual biological monitoring effort will yield information about the effects of this change in operation. However, there are no plans to do system survival studies, rather than project-specific studies, Bill Hevlin added.

What if the cost of the mitigation package turns out to be $60 million or $80 million, rather than $2 million to $5 million? Lothrop asked. Then we'll consider it, as well as what the potential funding stream might be, Cooper replied – again, we're still seeking input on what the appropriate package of offsets might be.

4. Next IT Meeting Date.

The next meeting of the Implementation Team was set for Thursday, May 6. Meeting summary prepared by Jeff Kuechle.